

~~TOP SECRET~~

(Security Classification)

ROUTING			
TO:	NAME AND ADDRESS	DATE	INITIALS
1	EO/ICS		
2	DD/ICS		
3			
4			
	ACTION	DIRECT REPLY	PREPARE REPLY
	APPROVAL	DISPATCH	RECOMMENDATION
	COMMENT	FILE	RETURN
	CONCURRENCE	INFORMATION	SIGNATURE
REMARKS:			
IG(Space) Meeting-February 5, 1986			
FROM: NAME, ADDRESS, AND PHONE NO.		DATE	
DD/PPS (Policy)			

CONTROL NO. BYE 1599-86COPY 1 OF           w/att BYE 1599-86/1, Copy 1  
BYE 1750-85, Copy 13, Ser B001

STAT

Handle Via

**BYEMAN-TALENT-KEYHOLE**

Channels

Access to this document will be restricted to  
those approved for the following specific activities:

\_\_\_\_\_  
\_\_\_\_\_



**NATIONAL SECURITY INFORMATION**

Unauthorized Disclosure Subject to Criminal Sanctions

~~TOP SECRET~~

(Security Classification)

**DISSEMINATION CONTROL ABBREVIATIONS**

<b>NOFORN-</b>	<b>Not Releasable to Foreign Nationals</b>
<b>NOCONTRACT-</b>	<b>Not Releasable to Contractors or Contractor/Consultants</b>
<b>PROPIN-</b>	<b>Caution-Proprietary Information Involved</b>
<b>ORCON-</b>	<b>Dissemination and Extraction of Information Controlled by Originator</b>
<b>REL . . . -</b>	<b>This Information has been Authorized for Release to . . .</b>

4 February 1986

MEMORANDUM FOR: Deputy Director, Intelligence Community Staff

FROM:

[redacted]  
Deputy Director for Policy  
Planning and Policy Staff

25X1

SUBJECT IG(Space) Meeting-February 5, 1986

1. The subject meeting has been rescheduled for 0930-1130 in Room 340 of the OEOB. We understand that the time was changed so that Mr. William Rogers and Mr. Neil Armstrong, Co-Chairmen of the Presidential Commission to Investigate the Shuttle Explosion, could attend (see Attachment A). [redacted]

25X1

2. The meeting announcement, Attachment B, contains a brief description of six options for ensuring continuity of the US space launch program. The IG(Space) members have been requested to be prepared to discuss these options and others that may be raised at the meeting. A working group will be formed to write a "White Paper" on the subject. We also understand that there has been a verbal request for each agency to describe the impact on their planned launches. [redacted]

25X1

3. We have been working with OSD and the NRO staff on an issue paper (Talker) and a background paper for the meeting (see Attachments C and D). Proposed talking points are at Attachment E. [redacted]

25X1

4. We do not have a good understanding of agency positions. Since this is just a meeting to start a work effort and acquaint the members with the problem, we do not expect any disagreements at this time. As you know, we have been strongly opposed to NASA positions on a great many launch-related policy issues over the past few years. DoD is sensitive to this history and intends to be as cooperative and non-confrontational as possible. Some limited information on NASA's possible positions is at Attachment F. DoT might have a "golden" opportunity to promote commercial ELVs as part of the recovery process. We have spoken to DoT staffers, but they have not given us any information on what they will say at the meeting. [redacted]

25X1

5. We have also assembled a notebook of background information that might be of some use to you in preparing for the meeting. You may be particularly interested in the following:

BYE 1599-86  
Copy

Handle via BYEMAN Channels

CL BY	BYE-1
DECL	OADR
DERIVED FROM	BYE-1

SECRET

SUBJECT: IG(Space) Meeting-February 5, 1986

- Newspaper clippings on the accident and its policy implications (Tabs B and C).
- NASA's 1986 Shuttle launch schedule (Tab N).
- DoD's space mission model and the NRP's Shuttle launch schedule and impacts (Tab O).

A considerable amount of material is also included on the fifth orbiter issue which was considered by the SIG(Space) in January 1983 and led to NSDD 80. Although the material is a little dated, it does contain an extensive discussion on Shuttle launch capacity and contingencies (such as the recent explosion) that might arise.

25X1

25X1

BYE 1599-86

Handle via BYEMAN Channels

SECRET

SUBJECT: IG(Space) Meeting-February 5, 1986

Distribution: (BYE 1599-86 w/att BYE 1599-86/1, BYE 1750-86 Cy 13, Ser B001)

- 1 - DD/ICS, w/att
- 2 - AD/PPS, wo/att
- 3 - PPS Subject [redacted] wo/att
- 4 - PPS Chrono, wo/att
- 5 - ICS Registry, wo/att

25X1X1

DCI/ICS/PPS [redacted] 4 Feb 86

25X1

BYE 1599-86

Handle via BYEMAN Channels

SECRET

**A**

Executive Order Establishing Independent Presidential  
Commission to Investigate the Shuttle Explosion

- Independent group drawn mainly from scientific, educational and business circles.
  - Co-chaired by William Rogers and Neil Armstrong.
  - Established by Executive Order on 3 February.
- Purpose and scope:
  - Establish cause or causes of the accident.
  - Develop recommendations for corrective actions.
  - "Take a hard look at the accident, to make a calm and deliberate assessment of the facts and ways to avoid repetition."
- Approach and schedule
  - To report to President and NASA administrator within 120 days.
  - Replaces the board already convened by NASA.
  - Can call on NASA investigators, retain its own experts.

All Portions of this  
Paper are UNCLASSIFIED

**B**



~~CONFIDENTIAL~~

**NATIONAL SECURITY COUNCIL**  
**WASHINGTON, D.C. 20506**

**CONFIDENTIAL****MEMORANDUM FOR:**

**MR. DONALD P. GREGG**  
 Assistant to the Vice President  
 for National Security Affairs

**CAPTAIN JOHN W. BITOFF**  
 Executive Assistant to the Chairman  
 Joint Chiefs of Staff

**MR. NICHOLAS PLATT**  
 Executive Secretary  
 Department of State

**MR. WILLIAM B. STAPLES**  
 Executive Secretary  
 Arms Control & Disarmament Agency

**COLONEL DAVID R. BROWN**  
 Executive Secretary  
 Department of Defense

**JOHN P. McTAGUE**  
 Acting Director  
 Office of Science & Technology Policy

**MRS. HELEN ROBBINS**  
 Executive Asst to the Secretary  
 Department of Commerce


**MR. NORMAN TERRELL**  
 Associate Administrator for Policy  
 National Aeronautics and Space  
 Administration

**MS. RUTH KNOUSE**  
 Director, Executive Secretariat  
 Department of Transportation

**MR. ALFRED H. KINGON**  
 Assistant to the President for  
 Cabinet Affairs

**MR. ALTON KEEL**  
 Associate Director for National  
 Security and International Affairs  
 Office of Management and Budget

**MR. MARTIN SMITH**  
 Special Assistant to the President  
 for Policy Development

  
 Executive Secretary  
 Central Intelligence Agency

25X1

**SUBJECT: IG(Space) Meeting - February 5, 1986 (U)**

As a result of the Shuttle tragedy of January 27, 1986, it is necessary to review the availability of capabilities and resources to ensure continuity of the U.S. space launch program. There are several options, or combinations of options, available that support continuity.

Option 1: Buy more Shuttles. This could cost in excess of \$2B a copy and may not make a vehicle available until 1991, at the earliest. This assumes an accelerated program with unlimited funding, and widespread Congressional support.

**CONFIDENTIAL**  
 Declassify on: OADR

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~CONFIDENTIAL

2

Option 2: Accelerate the national aerospace plane. This too would require unlimited funding, maximum Congressional support, and crash efforts by industry. Even with these efforts, it is not certain that it could be made operational any earlier than present program schedules allow.

Option 3: Buy more Titan 34Ds. At the present rate of purchase, the earliest availability is expected in 1988. Accelerated purchase of Titan 34D vehicles and in larger quantities could assure the launch of larger payloads. Exact numbers of vehicles required and their costs are not known.

Option 4: Use more Titan IIs. Present Congressional direction only allows consideration for use of 13 existing Titan IIs. Since there are considerably more of these vehicles available than 13, and their use is the subject of a difference of opinion, a reconciliation and a validation of the requirement for their use is necessary. Like the option to buy more Titan 34Ds, a close examination of all costs associated with Titan II use and conversion for space launch use is also necessary.

Option 5: Buy more Atlas/Centaur. The Atlas/Centaur production line is currently open and vehicles are being produced at a specified rate. Additional funds could be justified to buy more vehicles to launch necessary payloads. However, the Atlas/Centaur is a small missile and is only useful for certain payloads. Therefore, a detailed mission model, a program funding profile and a commitment from all who wish to launch payloads must be sought.

Option 6: Use civil and commercial launch vehicles. This is a prime opportunity for foreign and domestic commercial missile production companies and entrepreneurs to consider filling the breach created by the loss of a Shuttle. This requires establishment of a close working relationship between government and industry to consider making launch ranges available, expedite government licensing and federally subsidize insurance programs to assure commercial systems availability. (C)

The thoughts in these options are not complete nor have all complex facets of bringing any one or a combination of them to fruition been explored. In addition, there may be options that have not been mentioned but deserve evaluation. The members of the IG(Space) are therefore requested to attend the meeting prepared to discuss these options and any others you deem appropriate. Once discussion is complete it is the tentative plan to designate selected members of the IG(Space) to write a "White Paper" on maintaining the continuity of the U.S. space launch program. The paper will then be used to develop a new space strategy and policy statement. (C)

CONFIDENTIAL~~CONFIDENTIAL~~

CONFIDENTIAL

3

A meeting of the IG(Space) will be held on February 5, 1986, from 2:00-4:00 p.m., in Room 208 of the OEOB. Attendance will be limited to principal plus one. Please notify Jerry May of the NSC Staff (395-5022) of the names of your representatives by February 4, 1986.  
(U)

William F. Martin  
Executive Secretary

Attachment  
IG(Space) Membership List

CONFIDENTIAL

CONFIDENTIAL

**CHAIRMAN: DONALD R. FORTIER**

**Members**

**AMBASSADOR JOHN D. NEGROPONTE**  
Assistant Secretary for Oceans and International  
Environmental and Scientific Affairs  
Department of State

**DR. WILLIAM R. GRAHAM**  
Deputy Administrator  
National Aeronautics and Space Administration

**MR. CRAIG ALDERMAN**  
Deputy Under Secretary for Policy  
Department of Defense

**MS. MADELINE JOHNSON**  
Director, Office of Commercial Space Transportation  
Department of Transportation

**DR. ANTHONY CALIO**  
Administrator of the National Oceanic  
and Atmospheric Administration  
Department of Commerce

**VICE ADMIRAL E. A. BURKHALTER**  
Director, Intelligence Community Staff  
Central Intelligence Agency

**MAJOR GENERAL THOMAS C. BRANDT**  
Director of Joint Planning & Staffing for Space  
Office of the Joint Chiefs of Staff

**LOUIS V. NOSENZO**  
Acting Assistant Director for Strategic Programs  
Arms Control and Disarmament Agency

**Observers**

**DANIEL TAFT**  
National Security and International Affairs  
Special Studies  
Office of Management and Budget

**COLONEL MAURICE A. ROESCH, III**  
Assistant Director for Defense Technology  
and Systems  
Office of Science and Technology Policy

**MR. ALFRED H. KINGON**  
Assistant to the President for Cabinet Affairs

**MARTIN SMITH**  
Special Assistant to the President for Policy  
Development

**COLONEL SAMUEL WATSON**  
Deputy Assistant to the Vice President for  
National Security Affairs

**Executive Secretary: COLONEL GERALD M. MAY**  
Director of Space Programs, NSC Staff

**C**

TALKER  
FOR THE 5 FEBRUARY 1986  
IG (SPACE) MEETING

- The NSC paper calling the IG (Space) meeting (TAB A) lists a series of options to be discussed by the IG principals and implies that following this discussion a "white paper" will be prepared summarizing the recommendations of the group.
- Decisions by the IG principals must await the findings and recommendations of the operational agencies--DoD and NASA. Both the Air Force and NASA are presently reviewing these and other options. The policy options derived from these programmatic alternatives should be the focus of the interagency group.
- The IG should focus its attention on two basic issues:
  - What actions provide the best strategy for recovering from the near-term reduction in national space launch capability?
  - What changes in national policies provide the best strategy to prevent the recurrence of a similar interruption of our national space launch capability?
- It is also important to separate the many options identified in the NSC paper into those that can assist in the recovery of the national space launch capability in the near-term and those that are more long range in nature and cannot directly contribute to recovering from the current problem. Four distinct timeframes can be postulated:
  - In the near-term none of the options can have an appreciable effect. This period is characterized by accommodation, that is reprioritizing and possibly reallocating existing launch resources. No additional launch system can be brought to bear within this timeframe. This period includes roughly the next two years. The only launch assets will be the three orbiter STS fleet and the currently available ELVs.
  - The mid-term transition period begins with the first availability of additional launch assets. This could be either ELVs or replacement orbiters. This period is characterized by recovery, i.e., attempting to meet the real time requirements while trying to work off the backlog of mission that may not be accommodated in the near-term. This period could last from a few to several years.

- The mid-term equilibrium period begins as the combination of available launch assets overcomes the backlog of missions and is only required to launch each year's missions. When this condition is reached depends on the policies defined in the near-term, the extent of the STS grounding and the resulting backlog, the fiscal constraints imposed on the recovery, the future success of the individual launch programs.
- The far-term period includes the application of new technologies and/or the development and delivery of new systems. Programs such as a second generation Shuttle or a transatmospheric vehicle fall in this timeframe. Such programs represent major new investments and require leadtimes on the order of a decade to develop. None of these far-term systems aid in the recovery from the current operational impacts.
- In addressing these issues the IG should carefully consider both the nation's commitment to a strong manned spaceflight program and its need for a balanced, rebust space launch capability. Consideration should be given to assuring a balanced national space launch capability (i.e., manned and unmanned) while reaffirming our commitment to the manned space program. Defense must work closely with NASA to achieve both these critical objectives.
- The IG (Space) should impanel a working group to review the NASA and Air Force generated data and formulate a selection of policy options and recommendations for review by the IG principals. DoD and NASA should co-chair this working group.

4 February 1986

**D**



**BACKGROUND PAPER  
ON  
THE IMPLICATIONS OF THE LOSS OF CHALLENGER**

**BACKGROUND**

Last Tuesday's in-flight explosion of the Challenger reduced the STS fleet from four to three orbiters. This accident will ground the remainder of the STS fleet until the cause is known and corrective actions have been taken. This grounding comes at a time when NASA was attempting to increase the number of STS flights toward the goal of 24 per year. The result will be a backlog of missions that will have to be worked off along with the regularly scheduled flights. The STS is likely to be grounded for 6-12 months; this could cause a backlog of 7-14 missions. Next year NASA planned 20 STS flights. With only three orbiters of the originally planned orbiters available, it will be difficult for NASA to recover from this backlog.

Several options exist that aid in recovering: eliminate low priority missions, off-load simple launch missions onto expendable launch vehicles, build additional orbiters. The near-term (1-2 years) is likely to include eliminating lower priority missions. The DoD initiated a Complementary Expendable Launch Vehicle (CELV) program last year to augment the STS in launching selected, high priority national security missions; the first availability of this vehicle is scheduled for October of 1988. Only ten vehicles are currently being purchased. The DoD has also proposed to convert 13 Titan II ICBMs to space launch boosters for selected, small payloads. These too are projected to be available in the early 1988 timeframe.

The DoD planned to launch 14 ELVs this calendar year. While DoD may review its launch priorities and delay some of these planned launches to better hedge against extended STS fleet grounding, few-to-none of the existing ELVs could be made available to assist in working off the backlog of requirements caused by the interruption of STS operations.

The existing U.S. ELV production lines have been closed down. Atlas vehicles are still being assembled to meet the last of the Government's orders. Several Delta vehicles could be assembled from the last residual parts of their production runs. Titan production capability is in the process of being reestablished. However, none of these vehicles could be available in significant quantities until the late 1987 or early 1988 timeframe.

NASA was directed to fund a structural spares program when the decision was made to not produce a fifth orbiter. This program provided major structural assemblies such as the crew compartment, the mid-body, the wings, etc. These components could be assembled into a replacement orbiter in about three-four years.

### ISSUES

There are basically two issues that must be considered. The first addresses the options for recovering from the near-term loss of operational space launch capability. The second addresses the policies that best prevent a recurrence of such an interruption in national space launch capability.

To better put the issues and options in perspective several distinct timeframes can be defined. The first, the near-term, covers that period before any significant additional capability can be brought to bear. The STS fleet may be grounded for a good portion of this period and a replacement orbiter could not be made available. In addition, no significant number of ELVs could be made available. The near-term can be thought of as easily the next two years (CY 86 and CY 87).

The mid-term transition period begins as additional launch assets become available, e.g., a replacement orbiter or significant quantities of ELVs to assist in recovering from the backlog of missions. This period could last from three to five years (CY 88-CY 92).

The mid-term equilibrium period begins as the backlog is worked off and the combination of space launch vehicles becomes equal to the projected demand and those new missions that will inevitably materialize. This period could extend indefinitely into the next generation of launch vehicle (CY 93-CY 95 or through the year 2000).

The far-term period is defined as the timeframe in which the next generation launch systems begin to be available. This could include a second generation Shuttle, upgraded ELVs, or a transatmospheric vehicle. This period is likely to begin somewhere between 1995 and 2000.

### ADDITIONAL FACTORS (Not Prioritized)

Budget. The current fiscal constraints imposed by the Gramm/Rudman/Hollings legislation will make recovery strategies difficult and painful. While there is a possibility that the catastrophic nature of this accident will elicit relief from such budget pressures, it is more likely that the funds will have to be taken from other programs. For NASA this could be

particularly hard on the science programs and the space station effort. For DoD it will force an additional strain between the limited space budget and other budget accounts (e.g., ships, planes, operations, logistics, etc.) since there will not be sufficient funds within the space budget to reallocate to additional space launch systems.

**Space Commercialization.** Several years ago the President signed an NSDD directing the U.S. Government to encourage and foster the development of a commercial ELV industry in this country. The Department of Transportation was assigned the lead role in implementing this policy. They have had very little success since commercial ELVs would find themselves in direct competition with the NASA Shuttle. The Challenger accident may cause a renewal of the attempts to establish a commercial ELV industry that could augment the Government's space launch capability and contribute to reducing the impacts of STS fleet grounding in the future at little or no direct cost to the Government. The critical policy decisions necessary for such an industry to develop are (1) for the government to assure the private sector that they will not compete with it for the commercial satellite market and (2) for the Government to agree to buy selected launch services commercially from the private sector. This is in direct conflict with NASA's previous Shuttle policies.

**On-Going Studies.** Several on-going studies may have an influence on the pending policy debates although the recent accident may invalidate some of their conclusions and proposals. One is the NSDD directed joint DoD/NASA study of future launch needs. Another is the Presidential Commission on Space. The last is the recent interest in developing a transatmospheric vehicle that could take off, fly, and land like an aircraft but would be capable of achieving earth orbit (essentially of "space plane").

**Assured Access to Space.** The national security community has been pressing for a more diversified national space launch posture since the signing of the Defense Space Launch Strategy by the Secretary of Defense in 1984. The loss of Challenger and the resulting interruption of space launch operations highlights the underlying basis for this capability. While ELVs are certainly not immune to failures, the diversity of launch vehicles and their on-going production capability provide a more robust launch posture.

Several specific facts relating to the loss of Challenger are also pertinent. Challenger was one of the two Centaur configured orbiters as well as one of the two lighter weight orbiters. In addition, one of the two sets of airborne support equipment required by the IUS upper stage was also lost with the Challenger.

**DoD Preemption Rights on the STS.** While national policy states that national security missions will have priority on the STS and could preempt other scheduled missions to meet Defense needs, the policy could be viewed as valid only under normal operating conditions. The current situation has significant impact on the overall STS program and Defense should not expect to routinely exercise its preemption rights.

**Potentially Affected Policies.** Several current national space policies may be affected by the loss of Challenger and its effects on the national space launch capability and the STS program. Examples include the decision to not produce a fifth orbiter and to pursue a structural spares program, the DoD/NASA agreement that the DoD guarantee using one third of the available STS capacity, the use of the STS as the primary U.S. space launch vehicle. Assessments of required changes to these policies is in progress at this time.

**Summary.** At this time NASA does not have conclusive evidence of the failure that destroyed Challenger; no reasonable estimate can be made of the length of time the remaining STS flights will be grounded. Both NASA and the Air Force are reviewing the planned ELV launches and the priorities of those payloads. Additionally, both are assessing to what extent ELVs can be made available to help reduce the pending backlog of launches. It will be several weeks before any preliminary reprogramming can be finalized.

The NSC has requested that Defense be prepared to discuss the near-term impacts to your programs as a result of the Challenger loss and the interruption of STS operations. The Air Force is currently investigating these and other issues but we can provide a preliminary assessment covering the next two years. The charts that I would propose to use are attached.

4 February 1986

- 5 -

. . . .

E

Proposed Talking Points

- Shuttle explosion was a terrible tragedy for the individuals and for the country's space programs. It will have profound effects on all of us, but if we all work together we can come up with recovery plans in the best interests of the nation.
- We agree that the IG(Space) should address the policy issues associated with the recovery process. DoD and NASA should co-chair the Working Group. We will participate as a member of the Working group and provide the necessary inputs to the process as soon as they are available.
- We're not in a position to comment on the specific options at this time because the necessary technical input data ~~is~~ not yet available. However, it appears to us that decisions that would affect the far-term--such as acceleration of the national aerospace plane--can be deferred until we have sorted out the policies that will get us through the next ten years or so.

All Portions of this  
Paper are UNCLASSIFIED

• • • • •

**F**

### NASA Hardware Alternatives

#### Likely to be Proposed

- Build fifth Shuttle orbiter.
  - Cost: approximately \$2 billion.
  - Schedule: available not earlier than 1988 (More likely 90 or 91).
- Start on Shuttle II.
  - Cost: unknown.
  - Schedule: 1997 IOC.

#### Not Likely to be Proposed

- Use ELVs (post 1988)
  - o Commercial
  - o DoD
  - o NASA procured and launched.

#### NASA Concerns

- Budgetary Impact.
  - o Depends on whether or not NASA gets a budget increase to cover the recovery costs.
- Program Impact.
  - o Bow wave of launch delays will occur. Unlikely to be worked off until at least 1990.

#### NASA Goal

- To prepare a report on the alternatives for President via SIG(Space).
  - o Would like to submit a supplemental budget request in next 3-4 months.



IG(Space) Meeting on Space-Launch after Shuttle Failure

- IG(Space) meeting called for Wednesday, 5 February, to review options and plan follow-up studies leading to a new strategy and policy statement.
- D/ICS will attend as DCI representative. DoD will be represented by Craig Alderman, Deputy Under Secretary for Policy.
- Invitation to the meeting includes six options relating to purchase of more Shuttles or expanded use of ELVs.
- ICS working closely with DoD staff in preparing for meeting. Key policy issues are:
  - o How to set priorities for the limited ELV and Shuttle resources in next two years. (DoD has Shuttle use priority but may wish to establish a mechanism for equitable sharing from national perspective.)
  - o Presidential guidance on how to address budgetary impact of recovery options.
  - o Decisions on the type of mixed launch fleet we should have in the 1990s.

~~CONFIDENTIAL~~

**NATIONAL SECURITY COUNCIL**  
**WASHINGTON, D.C. 20506**

**CONFIDENTIAL****MEMORANDUM FOR:**

**MR. DONALD P. GREGG**  
 Assistant to the Vice President  
 for National Security Affairs

**MR. NICHOLAS PLATT**  
 Executive Secretary  
 Department of State

**COLONEL DAVID R. BROWN**  
 Executive Secretary  
 Department of Defense

**MRS. HELEN ROBBINS**  
 Executive Asst to the Secretary  
 Department of Commerce

**MS. RUTH KNOUSE**  
 Director, Executive Secretariat  
 Department of Transportation

**MR. ALTON KEEL**  
 Associate Director for National  
 Security and International Affairs  
 Office of Management and Budget

**CAPTAIN JOHN W. BITOFF**  
 Executive Assistant to the Chairman  
 Joint Chiefs of Staff

**MR. WILLIAM B. STAPLES**  
 Executive Secretary  
 Arms Control & Disarmament Agency

**JOHN P. McTAGUE**  
 Acting Director  
 Office of Science & Technology Policy

**MR. NORMAN TERRELL**  
 Associate Administrator for Policy  
 National Aeronautics and Space  
 Administration

**MR. ALFRED H. KINGON**  
 Assistant to the President for  
 Cabinet Affairs

**MR. MARTIN SMITH**  
 Special Assistant to the President  
 for Policy Development

**Executive Secretary**  
**Central Intelligence Agency**

25X1

**SUBJECT: IG(Space) Meeting - February 5, 1986 (U)**

As a result of the Shuttle tragedy of January 27, 1986, it is necessary to review the availability of capabilities and resources to ensure continuity of the U.S. space launch program. There are several options, or combinations of options, available that support continuity.

Option 1: Buy more Shuttles. This could cost in excess of \$2B a copy and may not make a vehicle available until 1991, at the earliest. This assumes an accelerated program with unlimited funding, and widespread Congressional support.

**CONFIDENTIAL**  
 Declassify on: OADR

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

2

CONFIDENTIAL

Option 2: Accelerate the national aerospace plane. This too would require unlimited funding, maximum Congressional support, and crash efforts by industry. Even with these efforts, it is not certain that it could be made operational any earlier than present program schedules allow.

Option 3: Buy more Titan 34Ds. At the present rate of purchase, the earliest availability is expected in 1988. Accelerated purchase of Titan 34D vehicles and in larger quantities could assure the launch of larger payloads. Exact numbers of vehicles required and their costs are not known.

Option 4: Use more Titan IIs. Present Congressional direction only allows consideration for use of 13 existing Titan IIs. Since there are considerably more of these vehicles available than 13, and their use is the subject of a difference of opinion, a reconciliation and a validation of the requirement for their use is necessary. Like the option to buy more Titan 34Ds, a close examination of all costs associated with Titan II use and conversion for space launch use is also necessary.

Option 5: Buy more Atlas/Centaur. The Atlas/Centaur production line is currently open and vehicles are being produced at a specified rate. Additional funds could be justified to buy more vehicles to launch necessary payloads. However, the Atlas/Centaur is a small missile and is only useful for certain payloads. Therefore, a detailed mission model, a program funding profile and a commitment from all who wish to launch payloads must be sought.

Option 6: Use civil and commercial launch vehicles. This is a prime opportunity for foreign and domestic commercial missile production companies and entrepreneurs to consider filling the breach created by the loss of a Shuttle. This requires establishment of a close working relationship between government and industry to consider making launch ranges available, expedite government licensing and federally subsidize insurance programs to assure commercial systems availability. (C)

The thoughts in these options are not complete nor have all complex facets of bringing any one or a combination of them to fruition been explored. In addition, there may be options that have not been mentioned but deserve evaluation. The members of the IG(Space) are therefore requested to attend the meeting prepared to discuss these options and any others you deem appropriate. Once discussion is complete it is the tentative plan to designate selected members of the IG(Space) to write a "White Paper" on maintaining the continuity of the U.S. space launch program. The paper will then be used to develop a new space strategy and policy statement. (C)

CONFIDENTIAL~~CONFIDENTIAL~~

**CONFIDENTIAL**

**3**

A meeting of the IG(Space) will be held on February 5, 1986, from 2:00-4:00 p.m., in Room 208 of the OEOB. Attendance will be limited to principal plus one. Please notify Jerry May of the NSC Staff (395-5022) of the names of your representatives by February 4, 1986.  
(U)

**William F. Martin  
Executive Secretary**

**Attachment  
IG(Space) Membership List**

**CONFIDENTIAL**

**CONFIDENTIAL**

**CHAIRMAN: DONALD R. FORTIER**

**Members**

**AMBASSADOR JOHN D. NEGROPONTE**  
**Assistant Secretary for Oceans and International**  
**Environmental and Scientific Affairs**  
**Department of State**

**DR. WILLIAM R. GRAHAM**  
**Deputy Administrator**  
**National Aeronautics and Space Administration**

**MR. CRAIG ALDERMAN**  
**Deputy Under Secretary for Policy**  
**Department of Defense**

**MS. MADELINE JOHNSON**  
**Director, Office of Commercial Space Transportation**  
**Department of Transportation**

**DR. ANTHONY CALIO**  
**Administrator of the National Oceanic**  
**and Atmospheric Administration**  
**Department of Commerce**

**VICE ADMIRAL E. A. BURKHALTER**  
**Director, Intelligence Community Staff**  
**Central Intelligence Agency**

**MAJOR GENERAL THOMAS C. BRANDT**  
**Director of Joint Planning & Staffing for Space**  
**Office of the Joint Chiefs of Staff**

**LOUIS V. NOSENZO**  
**Acting Assistant Director for Strategic Programs**  
**Arms Control and Disarmament Agency**

**Observers**

**DANIEL TAFT**  
**National Security and International Affairs**  
**Special Studies**  
**Office of Management and Budget**

**COLONEL MAURICE A. ROESCH, III**  
**Assistant Director for Defense Technology**  
**and Systems**  
**Office of Science and Technology Policy**

**MR. ALFRED H. KINGON**  
**Assistant to the President for Cabinet Affairs**

**MARTIN SMITH**  
**Special Assistant to the President for Policy**  
**Development**

**COLONEL SAMUEL WATSON**  
**Deputy Assistant to the Vice President for**  
**National Security Affairs**

**Executive Secretary: COLONEL GERALD M. MAY**  
**Director of Space Programs, NSC Staff**

WORKING PAPER

IG(Space) Meeting (3/6/86)

- Draft of report became available on 3/5/86 at 1500 hrs. (Tab C).
  - Report is much better than previous version in terms of balance and completeness. Some of the backup data has been removed.
  - Lays out three strategy alternatives.
    - A - Mixed Fleet
    - B - Shuttle-intensive
    - C - ELV-intensive
  - Gives rationale for preferring strategy A at cost (NASA plus DoD) of about \$6 Billion.
  - Contains a short treatment of policy and policy implementation issues. Key item is statement that Shuttle will not compete with private sector ELVs for commercial and foreign launch business.
- DoD strategy contained in this report has been approved by Weinberger.
  - Latham and Aldridge briefed Weinberger on Monday, 3 March 1986. ~~BYE briefing charts are at Tab A.~~ This briefing also given to [redacted] on 4 March 1986. Aldridge presumably has called McMahon on the content of the briefing. 25X1
  - This strategy is also planned to be presented at the IG(space) meeting. Secret briefing charts are at Tab B.
  - Key elements [redacted] of the DoD strategy are as follows: 25X1
    - o [redacted] launched on CELV starting in [redacted] Launch facilities at VAFB modified for CELV launch. 25X1
    - o [redacted] launched on Shuttle from VAFB. VAFB remains in operation [redacted]. 25X1
    - o [redacted] launched on Shuttle. Enhanced [redacted] launched on CELV. 25X1

Handle via BYEMAN Channels

25X1

TOP SECRET

25X1

[redacted] remains on ELVs.

[redacted] is launched with Titan II.

[redacted] but is launched from KSC.

-- [redacted] share of the DoD strategy is [redacted] in FY 86 and none in FY 87.

- [redacted] has had private discussions with a number of individuals who question the baseline strategy:

25X1

- o Most (privately) question the priority given to the VAFB Shuttle capability. Closing down the facility would save [redacted] year of O and M cost. [redacted] could be launched from KSC at a [redacted] vice the planned [redacted] from VAFB. (DoD is probably ready to reluctantly offer this as an offset if forced to do so.)

25X1

25X1

- o Many seriously question the need for a replacement orbiter of the current design. They believe that all launch needs in the next 10 years or so can be met with ELVs and a 3-orbiter fleet. They are concerned that a large investment in the Shuttle will take money away from efforts needed to define the next generation space launch systems.

25X1

- Probable issues to be discussed at the meeting.

- Adequacy of justification for replacement orbiter and lack of alternatives that realistically address budget constraints (OMB).
- Adequacy of policy discussion and general clarity of presentation. Commerce is working on their own revision to the current draft. (Commerce).
- Schedule (NASA and NSC Staff).
- Process for completing report (NSC Staff).

Handle via BYEMAN Channels

25X1

TOP SECRET

- Talking Point Themes.

- Need credible justification of strategy for Congress and the President.
- Need to ensure compatibility with probable findings of Presidential Commission.
- [REDACTED]
- Still believe that we will need at least a few more weeks to get the package into shape.

25X1

Handle via BYEMAN Channels

[REDACTED]

25X1

TOP SECRET



List of Tabs

- Tab A      National Security Shuttle Recovery/Reconstitution Strategy  
(TSB Briefing Charts)
- Tab B      National Security Shuttle Recovery/Reconstitution Strategy  
(SECRET Briefing Charts for IG[Space] Meeting)
- Tab C      IG(Space) Draft Report, Recommendations for the US Space Launch  
Program, 5 March 1986. NOTE: Third page contains list of  
Working Group Members
- Tab D      Memo from D/ICS to Mr. Donald Fortier, 21 February 1986,  
Subject: US Space Launch Program
- Tab E      Memo from McDaniel to IG(Space) members, dated 6 February 1986,  
Subject: IG(Space) Actions. NOTE: Last page contains list of  
IG(Space) members

**H**

Declassified in Part - Sanitized Copy Approved for Release 2013/10/24 : CIA-RDP92B00181R001501460002-2

**TOP SECRET/BYEMAN**

# **NATIONAL SECURITY SHUTTLE RECOVERY/RECONSTITUTION STRATEGY**

**MARCH 1986**

**TOP SECRET/BYEMAN**

Declassified in Part - Sanitized Copy Approved for Release 2013/10/24 : CIA-RDP92B00181R001501460002-2

TOP SECRET/BYEMAN

STS BACKLOG

	86	87	88	89	90	91	92	93	94
TOTAL PROJECTED MISSIONS	15	19	21	24	24	24	24	24	24
DOD PROJECTED MISSIONS	4	6	9	10	9	10	10	11	11
CONSERVATIVE CAPACITY	0	7	12	15	15	18	21	21	21
BACKLOG DEMAND	-15	-27	-36	-42	-44	-43	-38	-33	-28
DOD OFF-LOAD	0	0	0	-3	-4	-4	-5	-5	-5
C AND F LOSS	0	0	0	0	-3	-3	-3	-3	-3

TOP SECRET/BYEMAN

**UNCLASSIFIED**

## **NATIONAL SECURITY OBJECTIVE AND STRATEGY**

### **OBJECTIVE**

**ENSURE A MORE CAPABLE LAUNCH POSTURE  
THAN BEFORE CHALLENGER FAILURE**

### **STRATEGY**

- **MAINTAIN DOD COMMITMENT TO STS**
- **SELECTIVELY OFFLOAD MISSIONS TO ELVs**
- **DEVELOP DUAL COAST STS AND ELV LAUNCH FACILITIES**
- **ACHIEVE SATELLITE DUAL COMPATIBILITY WHERE PRACTICAL**

**UNCLASSIFIED**

**TOP SECRET/BYEMAN**

## **DRIVING CONSIDERATIONS**

- **ONE YEAR MINIMUM STS DOWNTIME**

- **[REDACTED] CAPABILITY SOONEST**

- **VAFB PROVIDES DESIRED**

- 

- **FUTURE STS PERFORMANCE CONSTRAINED**

- **STS LAUNCH FOR [REDACTED] UNLIKELY**

**TOP SECRET/BYEMAN**

25X1

25X1

25X1

25X1

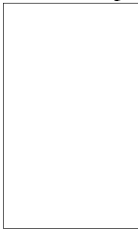
**TOP SECRET/BYEMAN**

## **NATIONAL SECURITY APPROACH**

### ● **DUAL LAUNCH FACILITIES**

- **MAINTAIN STS OPERATIONS FROM KSC AND VAFB**
- **ADD CELV CAPABILITY AT VAFB -- IOC FY 89**

### ● **SATELLITES AND BOOSTERS - MAJOR CONSIDERATIONS**

-  **REMAINS ON STS FROM VAFB**
- **SHIFTS TO CELV FROM VAFB**
  - **STS COMPATIBLE**
- **MILSTAR ON CELV FROM VEHICLE 1**
  - **DUAL COMPATIBLE**
- **DSP USES BOTH CELV/STS STARTING AT SAT 15**
- **GPS ON STS TO ACHIEVE FULL CONSTELLATION**
  - **REPLENISHMENT VIA ELV AT SAT 17**

**TOP SECRET/BYEMAN**

25X1

**TOP SECRET/BYEMAN**

## **NEED FOR STS AT VANDENBERG**

- **ELIMINATES DEPENDENCY ON SINGLE LAUNCH SYSTEM**



- **NO COST SAVINGS FROM VANDENBERG CLOSURE**

-  **CELV COMPATIBILITY**
- **RECOVERY**
- **SDI/ SPACE STATION**

- **KENNEDY SPACE CENTER BACKED UP**

- **THIRD LAUNCH PAD**
- **ADDITIONAL PROCESSING FACILITIES**

- **GREATER SECURITY**

**TOP SECRET/BYEMAN**

25X1

25X1



**Page Denied**

Next 1 Page(s) In Document Denied

**UNCLASSIFIED**

**LAUNCH RECOVERY PLAN**  
**(DELTA DOLLARS IN MILLIONS)**

	<u>FY 1986</u>	<u>FY87-91</u>	<u>TOTAL</u>
● SATELLITE MODIFICATION AND INTEGRATION	169	458	627
● BOOSTERS	324	2,485	2,809
● VANDENBERG CELV PAD MODIFICATION	22	219	241
● VANDENBERG AND KENNEDY O&M	35	291	326
● STS RIDE OFFSETS	<u>-</u>	<u>(1,321)</u>	<u>(1,321)</u>
 TOTAL	 550	 2,132	 2,682

**UNCLASSIFIED**

**TOP SECRET/BYEMAN**

**RECOMMENDED ACTIONS**

- **REVIEW WITH NASA AND DCI**
- **INFORM SENIOR INTERAGENCY GROUP (SPACE)**
- **PREPARE JOINT SUPPLEMENTAL**

**TOP SECRET/BYEMAN**



# SECRET

THIS IS A COVER SHEET

The information in this document  
is classified and as such will be  
treated according to OSD Security  
Instructions. Writing on this  
cover sheet is prohibited.

# SECRET

**SECRET**

**NATIONAL SECURITY  
SHUTTLE RECOVERY/RECONSTITUTION  
STRATEGY**

**· MARCH 1986 ·**

**SECRET**

SECRET

STS BACKLOG

	86	87	88	89	90	91	92	93	94
TOTAL PROJECTED MISSIONS	15	19	21	24	24	24	24	24	24
DOD PROJECTED MISSIONS	4	6	9	10	9	10	10	11	11
CONSERVATIVE CAPACITY	0	7	12	15	15	18	21	21	21
BACKLOG DEMAND	-15	-27	-36	-42	-44	-43	-38	-33	-28
DOD OFF-LOAD	0	0	0	-3	-4	-4	-5	-5	-5
C AND F LOSS	0	0	0	0	-3	-3	-3	-3	-3

SECRET

**UNCLASSIFIED**

## **NATIONAL SECURITY OBJECTIVE AND STRATEGY**

### **OBJECTIVE**

**ENSURE A MORE CAPABLE LAUNCH POSTURE  
THAN BEFORE CHALLENGER FAILURE**

### **STRATEGY**

- **MAINTAIN DOD COMMITMENT TO STS**
- **SELECTIVELY OFFLOAD MISSIONS TO ELVs**
- **DEVELOP DUAL COAST STS AND ELV LAUNCH FACILITIES**
- **ACHIEVE SATELLITE DUAL COMPATIBILITY WHERE PRACTICAL**

**UNCLASSIFIED**



**SECRET**

## **DRIVING CONSIDERATIONS**

- **ONE YEAR MINIMUM STS DOWNTIME**

- **CAPABILITY SOONEST**

- **VAFB PROVIDES DESIRED**

- **FUTURE STS PERFORMANCE CONSTRAINED**

- **DUAL COMPATABLE**

**SECRET**

25X1

25X1

25X1

**SECRET**

## **NATIONAL SECURITY APPROACH**

### ● **DUAL LAUNCH FACILITIES**

- **MAINTAIN STS OPERATIONS FROM KSC AND VAFB**
- **ADD CELV CAPABILITY AT VAFB -- IOC FY 89**

### ● **SATELLITES AND BOOSTERS - MAJOR CONSIDERATIONS**

- **SOME [ ] REMAIN ON STS FROM VAFB**
- AND SOME [ ] SHIFT TO CELV FROM STS/VAFB**
  - **STS COMPATIBLE**
- **MILSTAR ON CELV FROM VEHICLE 1**
  - **DUAL COMPATIBLE**
- **DSP USES BOTH CELV/STS STARTING AT SAT 15**
- **GPS ON STS TO ACHIEVE FULL CONSTELLATION**
  - **REPLENISHMENT VIA ELV AT SAT 17**

**SECRET**

25X1

**SECRET**

## **NEED FOR STS AT VANDENBERG**

- **ELIMINATES DEPENDENCY ON SINGLE LAUNCH SYSTEM**

- 

- **NO COST SAVINGS FROM VANDENBERG CLOSURE**

- CELV COMPATIBILITY
- RECOVERY
- SDI/ SPACE STATION

- **KENNEDY SPACE CENTER BACKED UP**

- THIRD LAUNCH PAD
- ADDITIONAL PROCESSING FACILITIES

- **GREATER SECURITY**

**SECRET**

25X1

25X1

**Page Denied**

Next 1 Page(s) In Document Denied

UNCLASSIFIED

**LAUNCH RECOVERY PLAN**  
**(DELTA DOLLARS IN MILLIONS)**

	<u>FY 1986</u>	<u>FY87-91</u>	<u>TOTAL</u>
● SATELLITE MODIFICATION AND INTEGRATION	169	458	627
● BOOSTERS	324	2,485	2,809
● VANDENBERG CELV PAD MODIFICATION	22	219	241
● VANDENBERG AND KENNEDY O&M	35	291	326
● STS RIDE OFFSETS	-	(1,321)	(1,321)
TOTAL	550	2,132	2,682

UNCLASSIFIED

**SECRET**

## **RECOMMENDED ACTIONS**

- **REVIEW WITH NASA**
- **INFORM SENIOR INTERAGENCY GROUP (SPACE)**
- **PREPARE JOINT SUPPLEMENTAL**
- **CO-SPONSOR WITH NASA TO THE WHITE HOUSE**

**SECRET**

J

STAT

Declassified in Part - Sanitized Copy Approved for Release 2013/10/24 : CIA-RDP92B00181R001501460002-2

**Page Denied**

Declassified in Part - Sanitized Copy Approved for Release 2013/10/24 : CIA-RDP92B00181R001501460002-2



# EXECUTIVE SECRETARIAT

## ROUTING SLIP

TO:

		ACTION	INFO	DATE	INITIAL
1	DCI		X		
2	DDCI		X		
3	EXDIR		X		
4	D/ICS	X			
5	DDI				
6	DDA				
7	DDO				
8	DDS&T				
9	Chm/NIC		X		
10	GC				
11	IG				
12	Compt				
13	D/OLL				
14	D/PAO				
15	D/PERS				
16	VC/NIC				
17	ES		X		
18					
19					
20					
21					
22					

SUSPENSE \_\_\_\_\_ Date \_\_\_\_\_

Remarks

To 4: Please see that name of attendee is called in.

STAT

3637 (10-81)

MAR 3

1036

Executive Secretary

28 Jan 86

Date

STAT

NATIONAL SECURITY COUNCIL  
WASHINGTON, D.C. 20506

83-0767X/1

February 26, 1986

## MEMORANDUM FOR:

MR. DONALD P. GREGG  
Assistant to the Vice President  
for National Security Affairs

CAPTAIN JOHN W. BITOFF  
Executive Assistant to the Chairman  
Joint Chiefs of Staff

MR. NICHOLAS PLATT  
Executive Secretary  
Department of State

MR. WILLIAM B. STAPLES  
Executive Secretary  
Arms Control & Disarmament Agency

COLONEL DAVID R. BROWN  
Executive Secretary  
Department of Defense

MR. JOHN P. McTAGUE  
Acting Director  
Office of Science & Technology Policy

MRS. HELEN ROBBINS  
Executive Asst to the Secretary  
Department of Commerce

MR. NORMAN TERRELL  
Associate Administrator for Policy  
National Aeronautics and Space  
Administration

MS. RUTH KNOUSE  
Director, Executive Secretariat  
Department of Transportation

MR. ALFRED H. KINGON  
Assistant to the President for  
Cabinet Affairs

MR. ALTON KEEL  
Associate Director for National  
Security and International Affairs  
Office of Management and Budget

MR. MICHAEL DRIGGS  
Special Assistant to the President  
for Policy Development

Executive Secretary  
Central Intelligence Agency

STAT

SUBJECT: IG(Space) Meeting - March 4, 1986

The next IG(Space) meeting will be held on ~~Tuesday, March 4, 1986~~, 3:00-4:00 p.m. in Room 208 of the OEOB. Principals plus one are invited. In order to assure clearance into the OEOB, please inform Col Jerry May (395-5022) of the names of your representatives by COB March 3, 1986.

  
Rodney B. McDaniel  
Executive Secretary

Attachment  
IG(Space) Membership List

INTERAGENCY GROUP FOR SPACE MEMBERSHIP

CHAIRMAN: DONALD R. FORTIER

Members

AMBASSADOR JOHN D. NEGROPONTE  
Assistant Secretary for Oceans and International  
Environmental and Scientific Affairs  
Department of State

DR. WILLIAM R. GRAHAM  
Deputy Administrator  
National Aeronautics and Space Administration

MR. CRAIG ALDERMAN  
Deputy Under Secretary for Policy  
Department of Defense

MS. MADELINE JOHNSON  
Director, Office of Commercial Space Transportation  
Department of Transportation

DR. ANTHONY CALIO  
Administrator of the National Oceanic  
and Atmospheric Administration  
Department of Commerce

VICE ADMIRAL E. A. BURKHALTER  
Director, Intelligence Community Staff  
Central Intelligence Agency

BRIGADIER GENERAL JOEL M. MCKEAN  
Deputy Director for Force Development & Strategic Plans  
Office of the Joint Chiefs of Staff

LOUIS V. NOSENZO  
Deputy Assistant Director for Strategic Programs  
Arms Control and Disarmament Agency

Observers

DANIEL TAFT  
National Security and International Affairs  
Special Studies  
Office of Management and Budget

COLONEL MAURICE A. ROESCH, III  
Assistant Director for Defense Technology  
and Systems  
Office of Science and Technology Policy

MR. ALFRED H. KINGON  
Assistant to the President for Cabinet Affairs

MICHAEL A. DRIGGS  
Special Assistant to the President for Policy  
Development

COLONEL SAMUEL WATSON  
Deputy Assistant to the Vice President for  
National Security Affairs

Executive Secretary: COLONEL GERALD M. MAY  
Director of Space Programs, NSC Staff